ELSEVIER

Journal of Organometallic Chemistry 578 (1999) 269

Journal of Organometallic Chemistry

Author Index of Volume 578

Adams, C.J., 178
Adams, R.D., 55, 91, 144
Ahlers, W., 115
Ansorge, M., 252
Antonelli, E., 210

Balch, A.L., 85
Bartik, T., 229
Baumann, W., 125
Beck, W., 247
Briel, O., 247
Bruce, M.I., 155
Bunz, U.H.F., 55, 91, 144
Buriez, B., 264
Burlakov, V.V., 125

Carty, A.J., 103
Ciurash, J., 68
Coat, F., 76
Colbert, M.C.B., 198
Cook, D.J., 264

Dembinski, R., 229
Deravakian, A., 68
Dötz, K.H., 223

Enkelmann, V., 144
Enright, G.D., 103
Erker, G., 115

Fattore, J.L., 260
Faust, R., 193
Fehn, A., 247
Fischer, H., 186
Francke, V., 125
Fröhlich, R., 115
Fu, W., 55, 91

Gerhardt, A., 223
Ghosh, S., 150
Gladysz, J.A., 229
Göbelt, B., 193
Guillemot, M., 76
Guo, L., 43

Halet, J.-F., 155
Hao, L., 85
Hardcastle, K.I., 68
Harlow, K.J., 264
Hartbaum, C., 186
Heo, R.W., 31
Hill, A.F., 264
Hodge, A.J., 198
Hrabusa III, J.M., 43

Janini, T.E., 260

Kahlal, S., 155
Kempe, R., 125
Khan, M.S., 198

Lapinte, C., 76
Lattimer, R., 43
Lee, T.R., 31
Lewis, J., 198
Lis, T., 229
Long, N.J., 198
Lo, K.K-W., 3
Lo Sterzo, C., 210
Low, P.J., 103, 155

Mathur, P., 150
Mayne, C.L., 229
Melikyan, G.G., 68
Mohler, D.L., 260
Morton, M.S., 133
Müller, T.J.J., 95, 252
Myer, S., 68

Nguyen, L., 91

Olmstead, M.M., 85
Onitsuka, K., 169
Ose, N., 169
Ozawa, F., 169

Page, N.A., 198
Parker, D.G., 198
Paul, F., 76
Pellny, P.-M., 125
Peuchert, U., 115
Peulecke, N., 125
Polborn, K., 252
Puranik, V.G., 150

Raithby, P.R., 178, 198
Roidl, G., 55, 144
Rosenthal, U., 125
Rosi, P., 210

Selegue, J.P., 133
Skelton, B.W., 155
Spannenberg, A., 125
Szafert, S., 229

Taira, Z., 61
Takahashi, S., 169
Tessier, C.A., 43
Toure, P., 68

Udachin, K.A., 103
Umbarkar, S.B., 150

Viola, E., 210

Walawalkar, M.G., 150
Weber, C., 193
Welton, T., 264
White, A.H., 155
White, A.J.P., 198, 264
Williams, D.J., 198, 264
Wilton-Ely, J.D.E.T., 264
Wong, K.M-C., 3

Yadegar, S., 68
Yam, V.W.-W., 3
Yamazaki, S., 61
Youngs, W.J., 43
Younus, M., 198

PII: S0022-328X(99)00042-X

ELSEVIER

Journal of Organometallic Chemistry 578 (1999) 271–275

Journal of Organometallic Chemistry

Subject Index of Volume 578

Acetylide
Synthesis and characterisation of mono-acetylide and unsymmetrical bis-acetylide complexes of ruthenium and osmium: X-ray structure determinations on $[(dppe)_2Ru(Cl)(C{\equiv}C{-}C_6H_4\text{-}p\text{-}NO_2)]$, $[(dppe)_2Ru(Cl)(C{\equiv}C{-}C_6H_3\text{-}o\text{-}CH_3\text{-}p\text{-}NO_2)]$ and $[(dppm)_2Os(C{\equiv}C{-}C_6H_4\text{-}p\text{-}CH_3)(C{\equiv}C{-}C_6H_4\text{-}p\text{-}NO_2)]$, 198

Acetylide complex
Reactions of acetylene-bridged diplatinum complexes with tetracyanoethylene, 169

Acetylide coupling
Coupling of σ-acetylide ligands at Group 4 metallocene complexes to yield methylenecyclopropene-type frameworks, 115

Acetylides
Luminescent polynuclear metal acetylides, 3

Alkenes
Redox active alkenyl-bridged bi- and trinuclear arene–$Cr(CO)_3$-complexes by Horner–Emmons–Wadsworth olefinations, 95

Alkyne
Dimerization of titanacyclocumulenes to titanium substituted radialenes: synthesis, stability and reactions of five-membered titanacyclocumulenes with a coupling of two 1,4-diphenyl-1,3-butadiyne between two titanocene molecules to radialene-like fused titanacyclopentadiene compounds, 125
Reactions of $M(C{\equiv}CC{\equiv}CR)(CO)_3Cp$ [M = Mo, W; R = H, $Fe(CO)_2Cp$, $M(CO)_3Cp$] with cobalt carbonyls: X-ray structures of $\{Cp(OC)_6Co_2M(\mu_3\text{-}C)\}C{\equiv}C\{(\mu_3\text{-}C)Co_2M'(CO)_8Cp\}$ (M = M′ = Mo, W; M = Mo, M′ = W), 155

Alkyne dimerization
Coupling of alkynes promoted by $Ru(CO)_3(PPh_3)_2$ and carbon dioxide: syntheses and structures of $(\eta^4\text{-}C_4R_2R'_2\text{-}CO)Ru(CO)_2(PPh_3)$ (R = R′ = Ph; R = Ph, R′ = C≡CPh) and $\{Ph_2C_4(C{\equiv}CPh)_2\}Ru(CO)(PPh_3)_2$, 61

Alkyne insertion
Coupling of σ-acetylide ligands at Group 4 metallocene complexes to yield methylenecyclopropene-type frameworks, 115

Alkynes
Acetylenic NIR-chromophores: 2,3-dialkynyl-1,4-diazabuta-1,3-diene complexes of Ni(0) and Ni(II), 193
An alternative synthesis of Vollhardt's [1,2-diethynyl-3,4-bis(trimethylsilyl)cyclobutadiene]cyclopentadienylcobalt and selective formation of its dimer, 144
Dialkynylated and functionalized alkynylated arene$Cr(CO)_3$-complexes—syntheses and structures of carbon rich chromium-complexed benzenes, 252
Novel mixed-metal–alkynyl complexes stabilised by di-imine ligands: synthesis, characterisation and electrochemistry of $[(^tBu_2bipy)Pt(C{\equiv}CR)_2M(SCN)]$ (R = C_6H_4Me, $SiMe_3$; M = Cu, Ag), 178

Alkynyl complexes
Synthesis of triynylcarbene complexes and of bi- and trinuclear complexes with heptatriynylidene C_7-bridges, 186

Alkynylstannanes
A convenient *short cut* from aromatic iodides to alkynylstannanes and their use for the straightforward preparation of polyacetylene and polymetallaacetylene polymers, 210

Allenylidene
Unprecedented coupling of vinylidene and allenylidene ligands with dithiocarbamates: X-ray structure of $[Ru\{C(\text{-}C{\equiv}CPh_2)SC(NMe_2)S\}(S_2CNMe_2)(CO)(PPh_3)]$, 264

Arene complexes
Dialkynylated and functionalized alkynylated arene$Cr(CO)_3$-complexes—syntheses and structures of carbon rich chromium-complexed benzenes, 252
Redox active alkenyl-bridged bi- and trinuclear arene–$Cr(CO)_3$-complexes by Horner–Emmons–Wadsworth olefinations, 95

Bent carbon chains
Appreciably bent sp carbon chains: synthesis, structure, and protonation of organometallic 1,3,5-triynes and 1,3,5,7-tetraynes of the formula $(\eta^5\text{-}C_5Me_5)Re(NO)(PPh_3)\text{-}((C{\equiv}C)_n\text{-}p\text{-}C_6H_4Me)$, 229

Benzannulation
Reactions of complex ligands 85: chiral quinoid and hydroquinoid [2.2]metacyclophanes via chromium-mediated intramolecular benzannulation, 223

Binuclear complexes
Synthesis of triynylcarbene complexes and of bi- and trinuclear complexes with heptatriynylidene C_7-bridges, 186

Bipyridyl
Novel mixed-metal–alkynyl complexes stabilised by di-imine ligands: synthesis, characterisation and electrochemistry of $[(^tBu_2bipy)Pt(C{\equiv}CR)_2M(SCN)]$ (R = C_6H_4Me, $SiMe_3$; M = u, Ag), 178

Bridging ligands
Synthesis of triynylcarbene complexes and of bi- and trinuclear complexes with heptatriynylidene C_7-bridges, 186

Butadiyne
Dimerization of titanacyclocumulenes to titanium substituted radialenes: synthesis, stability and reactions of five-membered titanacyclocumulenes with a coupling of two 1,4-diphenyl-1,3-butadiyne between two titanocene molecules to radialene-like fused titanacyclopentadiene compounds, 125

Butatrienylidene complex
First synthesis and spectroscopic characterization of isolated butatrienylidene complexes of transition metals, 76

C_{70}
Organometallic C_{70} chemistry. Preparation and crystallographic studies of $(\eta^2\text{-}C_{70})Pd(PPh_3)_2 \cdot CH_2Cl_2$ and $(C_{70}) \cdot 2\{(\eta^5\text{-}C_5H_5)_2Fe\}$, 85

Carbene
Formation of vinyl ether derivatives in the reaction of tributyltin hydride with cluster supported Fischer carbene complexes: structural characterisation of $[(CO)_6Fe_2Te_2\{\mu\text{-}PhC{=}CC(OEt)\}W(CO)_5]$, 150
Hydrocarbon bridged metal complexes: XLV. Dinuclear polyene-bridged Fischer carbene complexes and a star-shaped benzene-bridged tris(ferrocenyl-decapentaenyl) compound, 247

Carbene complexes
Reactions of complex ligands 85: chiral quinoid and hydroquinoid [2.2]metacyclophanes via chromium-mediated intramolecular benzannulation, 223

PII: S0022-328X(99)00043-1

Synthesis of triynylcarbene complexes and of bi- and trinuclear complexes with heptatriynylidene C_7-bridges, 186

Carbide
The cyclo-C_3 ligand: trimetallic cyclopropenium complexes of Group 6–8 metals, including the X-ray crystal structure of $[\{Fe(CO)_2(Cp)\}_2(\mu_3\text{-}C_3)][SbF_6]$, 133

Carbon chain
Reactions of $M(C{\equiv}CC{\equiv}CR)(CO)_3Cp$ [M = Mo, W; R = H, $Fe(CO)_2Cp$, $M(CO)_3Cp$] with cobalt carbonyls: X-ray structures of $\{Cp(OC)_6Co_2M(\mu_3\text{-}C)\}C{\equiv}C\{(\mu_3\text{-}C)Co_2M'(CO)_6Cp\}$ (M = M′ = Mo, W; M = Mo, M′ = W), 155

Carbyne
Reactions of $M(C{\equiv}CC{\equiv}CR)(CO)_3Cp$ [M = Mo, W; R = H, $Fe(CO)_2Cp$, $M(CO)_3Cp$] with cobalt carbonyls: X-ray structures of $\{Cp(OC)_6Co_2M(\mu_3\text{-}C)\}C{\equiv}C\{(\mu_3\text{-}C)Co_2M'(CO)_6Cp\}$ (M = M′ = Mo, W; M = Mo, M′ = W), 155

Catalysis
Dialkynylated and functionalized alkynylated arene$Cr(CO)_3$-complexes—syntheses and structures of carbon rich chromium-complexed benzenes, 252

C–C-coupling
Dimerization of titanacyclocumulenes to titanium substituted radialenes: synthesis, stability and reactions of five-membered titanacyclocumulenes with a coupling of two 1,4-diphenyl-1,3-butadiyne between two titanocene molecules to radialene-like fused titanacyclopentadiene compounds, 125

Chalcogen
Formation of vinyl ether derivatives in the reaction of tributyltin hydride with cluster supported Fischer carbene complexes: structural characterisation of $[(CO)_6Fe_2Te_2\{\mu\text{-}PhC{-}CC(OEt)\}W(CO)_5]$, 150

Charge-transfer
Acetylenic NIR-chromophores: 2,3-dialkynyl-1,4-diazabuta-1,3-diene complexes of Ni(0) and Ni(II), 193

Chromium
Dialkynylated and functionalized alkynylated arene$Cr(CO)_3$-complexes—syntheses and structures of carbon rich chromium-complexed benzenes, 252
Redox active alkenyl-bridged bi- and trinuclear arene–$Cr(CO)_3$-complexes by Horner–Emmons–Wadsworth olefinations, 95

Chromium complexes
Reactions of complex ligands 85: chiral quinoid and hydroquinoid [2.2]metacyclophanes via chromium-mediated intramolecular benzannulation, 223

Cluster
Formation of vinyl ether derivatives in the reaction of tributyltin hydride with cluster supported Fischer carbene complexes: structural characterisation of $[(CO)_6Fe_2Te_2\{\mu\text{-}PhC{=}CC(OEt)\}W(CO)_5]$, 150
Reactions of $M(C{\equiv}CC{\equiv}CR)(CO)_3Cp$ [M = Mo, W; R = H, $Fe(CO)_2Cp$, $M(CO)_3Cp$] with cobalt carbonyls: X-ray structures of $\{Cp(OC)_6Co_2M(\mu_3\text{-}C)\}C{\equiv}C\{(\mu_3\text{-}C)Co_2M'(CO)_6Cp\}$ (M = M′ = Mo, W; M = Mo, M′ = W), 155
The synthesis and structural analyses of ruthenium carbonyl cluster complexes containing the bis-(trimethylsilyl)hexatriyne ligand, 55

Cobalt
An alternative synthesis of Vollhardt's [1,2-diethynyl-3,4-bis(trimethylsilyl)cyclobutadiene]cyclopentadienylcobalt and selective formation of its dimer, 144
Reactions of $M(C{\equiv}CC{\equiv}CR)(CO)_3Cp$ [M = Mo, W; R = H, $Fe(CO)_2Cp$, $M(CO)_3Cp$] with cobalt carbonyls: X-ray structures of $\{Cp(OC)_6Co_2M(\mu_3\text{-}C)\}C{\equiv}C\{(\mu_3\text{-}C)Co_2M'(CO)_6Cp\}$ (M = M′ = Mo, W; M = Mo, M′ = W), 155
The synthesis and structural analysis of the bis-$Co_2(CO)_6$ adduct of the cyclic tetrayne $C_{20}H_8$, 91

Cobalt complex
Cobalt-templated radical processes: inter- and intramolecular coupling of propargyl radicals, 68

Copper
Dialkynylated and functionalized alkynylated arene$Cr(CO)_3$-complexes—syntheses and structures of carbon rich chromium-complexed benzenes, 252
Novel mixed-metal–alkynyl complexes stabilised by di-imine ligands: synthesis, characterisation and electrochemistry of $[(^tBu_2bipy)Pt(C{\equiv}CR)_2M(SCN)]$ (R = C_6H_4Me, $SiMe_3$; M = Cu, Ag), 178

Copper(I)
Luminescent polynuclear metal acetylides, 3

Coupling reaction
Synthesis of triynylcarbene complexes and of bi- and trinuclear complexes with heptatriynylidene C_7-bridges, 186

Crystallography
Appreciably bent sp carbon chains: synthesis, structure, and protonation of organometallic 1,3,5-triynes and 1,3,5,7-tetraynes of the formula $(\eta^5\text{-}C_5Me_5)Re(NO)(PPh_3)\text{-}((C{\equiv}C)_n\text{-}p\text{-}C_6H_4Me)$, 229

Crystal structure
Cobalt-templated radical processes: inter- and intramolecular coupling of propargyl radicals, 68
The synthesis and structural analysis of the bis-$Co_2(CO)_6$ adduct of the cyclic tetrayne $C_{20}H_8$, 91

Crystal structures
Coupling of alkynes promoted by $Ru(CO)_3(PPh_3)_2$ and carbon dioxide: syntheses and structures of $(\eta^4\text{-}C_4R_2R'_2CO)Ru(CO)_2(PPh_3)$ (R = R′ = Ph; R = Ph, R′ = C≡CPh) and $\{Ph_2C_4(C{\equiv}CPh)_2\}Ru(CO)(PPh_3)_2$, 61
Novel mixed-metal–alkynyl complexes stabilised by di-imine ligands: synthesis, characterisation and electrochemistry of $[(^tBu_2bipy)Pt(C{\equiv}CR)_2M(SCN)]$ (R = C_6H_4Me, $SiMe_3$; M = Cu, Ag), 178
The synthesis and structural analyses of ruthenium carbonyl cluster complexes containing the bis-(trimethylsilyl)hexatriyne ligand, 55

Cyclic tetrayne
The synthesis and structural analysis of the bis-$Co_2(CO)_6$ adduct of the cyclic tetrayne $C_{20}H_8$, 91

Cyclic voltammetry
Redox active alkenyl-bridged bi- and trinuclear arene–$Cr(CO)_3$-complexes by Horner–Emmons–Wadsworth olefinations, 95

Cycloaddition
Reactions of acetylene-bridged diplatinum complexes with tetracyanoethylene, 169

1,5-Cycloalkadilyne
Cobalt-templated radical processes: inter- and intramolecular coupling of propargyl radicals, 68

Cyclobutadiene complexes
An alternative synthesis of Vollhardt's [1,2-diethynyl-3,4-bis(trimethylsilyl)cyclobutadiene]cyclopentadienylcobalt and selective formation of its dimer, 144

Cyclocumulene
Dimerization of titanacyclocumulenes to titanium substituted radialenes: synthesis, stability and reactions of five-membered titanacyclocumulenes with a coupling of two 1,4-diphenyl-1,3-butadiyne between two titanocene molecules to radialene-like fused titanacyclopentadiene compounds, 125

Cyclophanes
Reactions of complex ligands 85: chiral quinoid and hydroquinoid [2.2]metacyclophanes via chromium-mediated intramolecular benzannulation, 223

Cyclopropenium
The cyclo-C_3 ligand: trimetallic cyclopropenium complexes of Group 6–8 metals, including the X-ray crystal structure of $[\{Fe(CO)_2(Cp)\}_2(\mu_3\text{-}C_3)][SbF_6]$, 133

Diacetylene
Syntheses and crystal structures of strained planar silacyclynes containing a diacetylene unit, 43

Diazabutadienes
Acetylenic NIR-chromophores: 2,3-dialkynyl-1,4-diazabuta-1,3-diene complexes of Ni(0) and Ni(II), 193
Diethynylated cyclobutadiene
Coupling of alkynes promoted by $Ru(CO)_3(PPh_3)_2$ and carbon dioxide: syntheses and structures of $(\eta^4\text{-}C_4R_2R'_2CO)Ru(CO)_2(PPh_3)$ ($R = R' = Ph$; $R = Ph$, $R' = C{\equiv}CPh$) and $\{Ph_2C_4(C{\equiv}CPh)_2\}Ru(CO)(PPh_3)_2$, 61
Diethynylated cyclopentadienone
Coupling of alkynes promoted by $Ru(CO)_3(PPh_3)_2$ and carbon dioxide: syntheses and structures of $(\eta^4\text{-}C_4R_2R'_2CO)Ru(CO)_2(PPh_3)$ ($R = R' = Ph$; $R = Ph$, $R' = C{\equiv}CPh$) and $\{Ph_2C_4(C{\equiv}CPh)_2\}Ru(CO)(PPh_3)_2$, 61
d^0-Isonitrile complexes
Coupling of σ-acetylide ligands at Group 4 metallocene complexes to yield methylenecyclopropene-type frameworks, 115
Dithiocarbamate
Unprecedented coupling of vinylidene and allenylidene ligands with dithiocarbamates: X-ray structure of $[Ru\{C(=C{=}CPh_2)SC(NMe_2)S\}(S_2CNMe_2)(CO)(PPh_3)]$, 264

Electrochemistry
Synthesis and characterisation of mono-acetylide and unsymmetrical bis-acetylide complexes of ruthenium and osmium: X-ray structure determinations on $[(dppe)_2Ru(Cl)(C{\equiv}C{-}C_6H_4\text{-}p\text{-}NO_2)]$, $[(dppe)_2Ru(Cl)(C{\equiv}C{-}C_6H_3\text{-}o\text{-}CH_3\text{-}p\text{-}NO_2)]$ and $[(dppm)_2Os(C{\equiv}C{-}C_6H_4\text{-}p\text{-}CH_3)(C{\equiv}C{-}C_6H_4\text{-}p\text{-}NO_2)]$, 198
Electron-deficient olefin
Reactions of acetylene-bridged diplatinum complexes with tetracyanoethylene, 169
Ethynyl cluster
Synthesis and structure of metallocarbon clusters bearing pendant ethynyl ligands. X-ray crystal structures of $Os_3(CO)_9(\mu\text{-}CO)(\mu_3\text{-}\eta^1,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$, $Os_3Ru(CO)_{12}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$, $Ru_4(CO)_{12}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$ and $\{Ru_4(CO)_{12}\}\{Co_2(CO)_6\}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2{:}\mu\text{-}\eta^2,\eta^2\text{-}Me_3SiC_2C{\equiv}CC_2SiMe_3)$, 103

Ferrocene
Ferrocenophanes with all carbon bridges, 31
Organometallic C_{70} chemistry. Preparation and crystallographic studies of $(\eta^2\text{-}C_{70})Pd(PPh_3)_2 \cdot CH_2Cl_2$ and $(C_{70}) \cdot 2\{(\eta^5\text{-}C_5H_5)_2Fe\}$, 85
Redox active alkenyl-bridged bi- and trinuclear arene–$Cr(CO)_3$ complexes by Horner–Emmons–Wadsworth olefinations, 95
Ferrocenophane
Ferrocenophanes with all carbon bridges, 31
Ferrocenyl
Hydrocarbon bridged metal complexes: XLV. Dinuclear polyene-bridged Fischer carbene complexes and a star-shaped benzene-bridged tris(ferrocenyl-decapentaenyl) compound, 247
Fullerene
Organometallic C_{70} chemistry. Preparation and crystallographic studies of $(\eta^2\text{-}C_{70})Pd(PPh_3)_2 \cdot CH_2Cl_2$ and $(C_{70}) \cdot 2\{(\eta^5\text{-}C_5H_5)_2Fe\}$, 85

Gold(I)
Luminescent polynuclear metal acetylides, 3

Heterocyclyne
Syntheses and crystal structures of strained planar silacyclynes containing a diacetylene unit, 43
Hexatriyne
Synthesis and structure of metallocarbon clusters bearing pendant ethynyl ligands. X-ray crystal structures of $Os_3(CO)_9(\mu\text{-}CO)(\mu_3\text{-}\eta^1,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$, $Os_3Ru(CO)_{12}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$, $Ru_4(CO)_{12}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$ and $\{Ru_4(CO)_{12}\}\{Co_2(CO)_6\}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2{:}\mu\text{-}\eta^2,\eta^2\text{-}Me_3SiC_2C{\equiv}CC_2SiMe_3)$, 103
The synthesis and structural analyses of ruthenium carbonyl cluster complexes containing the bis-(trimethylsilyl)-hexatriyne ligand, 55
Hydrogen bonding
An alternative synthesis of Vollhardt's [1,2-diethynyl-3,4-bis(trimethylsilyl)cyclobutadiene]cyclopentadienylcobalt and selective formation of its dimer, 144

Iron
First synthesis and spectroscopic characterization of isolated butatrienylidene complexes of transition metals, 76
Formation of vinyl ether derivatives in the reaction of tributyltin hydride with cluster supported Fischer carbene complexes: structural characterisation of $[(CO)_6Fe_2Te_2\{\mu\text{-}PhC{=}CC(OEt)\}W(CO)_5]$, 150
Redox active alkenyl-bridged bi- and trinuclear arene–$Cr(CO)_3$ complexes by Horner–Emmons–Wadsworth olefinations, 95
The cyclo-C_3 ligand: trimetallic cyclopropenium complexes of Group 6–8 metals, including the X-ray crystal structure of $[\{Fe(CO)_2(Cp)\}_3(\mu_3\text{-}C_3)][SbF_6]$, 133

Ligand-coupling
Unprecedented coupling of vinylidene and allenylidene ligands with dithiocarbamates: X-ray structure of $[Ru\{C(=C{=}CPh_2)SC(NMe_2)S\}(S_2CNMe_2)(CO)(PPh_3)]$, 264
Luminescence
Luminescent polynuclear metal acetylides, 3

Metallacycle
Unprecedented coupling of vinylidene and allenylidene ligands with dithiocarbamates: X-ray structure of $[Ru\{C(=C{=}CPh_2)SC(NMe_2)S\}(S_2CNMe_2)(CO)(PPh_3)]$, 264
Methylenecyclopropenes
Coupling of σ-acetylide ligands at Group 4 metallocene complexes to yield methylenecyclopropene-type frameworks, 115
Molecular wires
Rapid assembly of rigid rods by metal complexation of bis(terpyridyl) ligands, 260
Molybdenum
The cyclo-C_3 ligand: trimetallic cyclopropenium complexes of Group 6–8 metals, including the X-ray crystal structure of $[\{Fe(CO)_2(Cp)\}_3(\mu_3\text{-}C_3)][SbF_6]$, 133

Nickel complexes
Acetylenic NIR-chromophores: 2,3-dialkynyl-1,4-diazabuta-1,3-diene complexes of Ni(0) and Ni(II), 193

Organoiron(II)
First synthesis and spectroscopic characterization of isolated butatrienylidene complexes of transition metals, 76
Organometallic
Ferrocenophanes with all carbon bridges, 31
Osmium
Synthesis and characterisation of mono-acetylide and unsymmetrical bis-acetylide complexes of ruthenium and osmium: X-ray structure determinations on $[(dppe)_2Ru(Cl)(C{\equiv}C{-}C_6H_4\text{-}p\text{-}NO_2)]$, $[(dppe)_2Ru(Cl)(C{\equiv}C{-}C_6H_3\text{-}o\text{-}CH_3\text{-}p\text{-}NO_2)]$ and $[(dppm)_2Os(C{\equiv}C{-}C_6H_4\text{-}p\text{-}CH_3)(C{\equiv}C{-}C_6H_4\text{-}p\text{-}NO_2)]$, 198
Synthesis and structure of metallocarbon clusters bearing pendant ethynyl ligands. X-ray crystal structures of $Os_3(CO)_9(\mu\text{-}CO)(\mu_3\text{-}\eta^1,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$, $Os_3Ru(CO)_{12}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$, $Ru_4(CO)_{12}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$ and $\{Ru_4(CO)_{12}\}\{Co_2(CO)_6\}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2{:}\mu\text{-}\eta^2,\eta^2\text{-}Me_3SiC_2C{\equiv}CC_2SiMe_3)$, 103

Palladium
Dialkynylated and functionalized alkynylated areneCr(CO)$_3$-complexes—syntheses and structures of carbon rich chromium-complexed benzenes, 252
Organometallic C_{70} chemistry. Preparation and crystallographic studies of $(\eta^2\text{-}C_{70})Pd(PPh_3)_2 \cdot CH_2Cl_2$ and $(C_{70}) \cdot 2\{(\eta^5\text{-}C_5H_5)_2Fe\}$, 85
Photoredox
Luminescent polynuclear metal acetylides, 3
Platinum
Novel mixed-metal–alkynyl complexes stabilised by di-imine ligands: synthesis, characterisation and electrochemistry of $[('Bu_2bipy)Pt(C{\equiv}CR)_2M(SCN)]$ ($R = C_6H_4Me$, $SiMe_3$; $M = Cu$, Ag), 178
Platinum complex
Reactions of acetylene-bridged diplatinum complexes with tetracyanoethylene, 169
Platinum (II)
Luminescent polynuclear metal acetylides, 3
Polyacetylene
A convenient *short cut* from aromatic iodides to alkynylstannanes and their use for the straightforward preparation of polyacetylene and polymetallaacetylene polymers, 210
Polyene
Hydrocarbon bridged metal complexes: XLV. Dinuclear polyene-bridged Fischer carbene complexes and a star-shaped benzene-bridged tris(ferrocenyl-decapentaenyl) compound, 247
Polymers
Ferrocenophanes with all carbon bridges, 31
Polymetallaacetylene
A convenient *short cut* from aromatic iodides to alkynylstannanes and their use for the straightforward preparation of polyacetylene and polymetallaacetylene polymers, 210
Polyynes
Appreciably bent sp carbon chains: synthesis, structure, and protonation of organometallic 1,3,5-triynes and 1,3,5,7-tetraynes of the formula $(\eta^5\text{-}C_5Me_5)Re(NO)(PPh_3)((C{\equiv}C)_n\text{-}p\text{-}C_6H_4Me)$, 229
Propargyl cation
Cobalt-templated radical processes: inter- and intramolecular coupling of propargyl radicals, 68
Propargyl radical
Cobalt-templated radical processes: inter- and intramolecular coupling of propargyl radicals, 68

Quinones
Reactions of complex ligands 85: chiral quinoid and hydroquinoid [2.2]metacyclophanes via chromium-mediated intramolecular benzannulation, 223

Radialene
Dimerization of titanacyclocumulenes to titanium substituted radialenes: synthesis, stability and reactions of five-membered titanacyclocumulenes with a coupling of two 1,4-diphenyl-1,3-butadiyne between two titanocene molecules to radialene-like fused titanacyclopentadiene compounds, 125
Reductive disproportionation of carbon dioxide
Coupling of alkynes promoted by $Ru(CO)_3(PPh_3)_2$ and carbon dioxide: syntheses and structures of $(\eta^4\text{-}C_4R_2R'_2CO)Ru(CO)_2(PPh_3)$ ($R = R' = Ph$; $R = Ph$, $R' = C{\equiv}CPh$) and $\{Ph_2C_4(C{\equiv}CPh)_2\}Ru(CO)(PPh_3)_2$, 61
Rhenium
Appreciably bent sp carbon chains: synthesis, structure, and protonation of organometallic 1,3,5-triynes and 1,3,5,7-tetraynes of the formula $(\eta^5\text{-}C_5Me_5)Re(NO)(PPh_3)\text{-}((C{\equiv}C)_n\text{-}p\text{-}C_6H_4Me)$, 229
The cyclo-C_3 ligand: trimetallic cyclopropenium complexes of Group 6–8 metals, including the X-ray crystal structure of $[\{Fe(CO)_2(Cp)\}_3(\mu_3\text{-}C_3)][SbF_6]$, 133
Rhenium(I)
Luminescent polynuclear metal acetylides, 3
Ruthenium
Rapid assembly of rigid rods by metal complexation of bis(terpyridyl) ligands, 260

Synthesis and characterisation of mono-acetylide and unsymmetrical bis-acetylide complexes of ruthenium and osmium: X-ray structure determinations on $[(dppe)_2Ru(Cl)(C{\equiv}C\text{-}C_6H_4\text{-}p\text{-}NO_2)]$, $[(dppe)_2Ru(Cl)(C{\equiv}C\text{-}C_6H_3\text{-}o\text{-}CH_3\text{-}p\text{-}NO_2)]$ and $[(dppm)_2Os(C{\equiv}C\text{-}C_6H_4\text{-}p\text{-}CH_3)(C{\equiv}C\text{-}C_6H_4\text{-}p\text{-}NO_2)]$, 198
Synthesis and structure of metallocarbon clusters bearing pendant ethynyl ligands. X-ray crystal structures of $Os_3(CO)_9(\mu\text{-}CO)(\mu_3\text{-}\eta^1,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$, $Os_3Ru(CO)_{12}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$, $Ru_4(CO)_{12}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2\text{-}Me_3SiC{\equiv}CC_2C{\equiv}CSiMe_3)$ and $\{Ru_4(CO)_{12}\}\text{-}\{Co_2(CO)_6\}(\mu_4\text{-}\eta^1,\eta^2,\eta^1,\eta^2\text{:}\mu\text{-}\eta^2,\eta^2\text{-}Me_3SiC_2C{\equiv}CC_2SiMe_3)$, 103
Synthesis of triynylcarbene complexes and of bi- and trinuclear complexes with heptatriynylidene C_7-bridges, 186
The cyclo-C_3 ligand: trimetallic cyclopropenium complexes of Group 6–8 metals, including the X-ray crystal structure of $[\{Fe(CO)_2(Cp)\}_3(\mu_3\text{-}C_3)][SbF_6]$, 133
The synthesis and structural analyses of ruthenium carbonyl cluster complexes containing the bis-(trimethylsilyl) hexatriyne ligand, 55
Unprecedented coupling of vinylidene and allenylidene ligands with dithiocarbamates: X-ray structure of $[Ru\{C(=C\text{-}CPh_2)SC(NMe_2)S\}(S_2CNMe_2)(CO)(PPh_3)]$, 264
Silicon
Syntheses and crystal structures of strained planar silacyclynes containing a diacetylene unit, 43
Silver
Novel mixed-metal–alkynyl complexes stabilised by di-imine ligands: synthesis, characterisation and electrochemistry of $[('Bu_2bipy)Pt(C{\equiv}CR)_2M(SCN)]$ ($R = C_6H_4Me$, $SiMe_3$; $M = Cu$, Ag), 178
Silver(I)
Luminescent polynuclear metal acetylides, 3
Stille coupling
A convenient *short cut* from aromatic iodides to alkynylstannanes and their use for the straightforward preparation of polyacetylene and polymetallaacetylene polymers, 210
Synthesis
Coupling of alkynes promoted by $Ru(CO)_3(PPh_3)_2$ and carbon dioxide: syntheses and structures of $(\eta^4\text{-}C_4R_2R'_2CO)Ru(CO)_2(PPh_3)$ ($R = R' = Ph$; $R = Ph$, $R' = C{\equiv}CPh$) and $\{Ph_2C_4(C{\equiv}CPh)_2\}Ru(CO)(PPh_3)_2$, 61

Tellurium
Formation of vinyl ether derivatives in the reaction of tributyltin hydride with cluster supported Fischer carbene complexes: structural characterisation of $[(CO)_6Fe_2Te_2\{\mu\text{-}PhC\text{-}CC(OEt)\}W(CO)_5]$, 150
Terpyridine
Rapid assembly of rigid rods by metal complexation of bis(terpyridyl) ligands, 260
Titanocene
Dimerization of titanacyclocumulenes to titanium substituted radialenes: synthesis, stability and reactions of five-membered titanacyclocumulenes with a coupling of two 1,4-diphenyl-1,3-butadiyne between two titanocene molecules to radialene-like fused titanacyclopentadiene compounds, 125
1,4-Topological polymerization
Syntheses and crystal structures of strained planar silacyclynes containing a diacetylene unit, 43
Tungsten
Reactions of $M(C{\equiv}CC{=}CR)(CO)_3Cp$ [M = Mo, W; R = H, $Fe(CO)_2Cp$, $M(CO)_3Cp$] with cobalt carbonyls: X-ray structures of $\{Cp(OC)_6Co_2M(\mu_3\text{-}C)\}C{\equiv}C\{(\mu_3\text{-}C)Co_2\text{-}M'(CO)_8Cp\}$ ($M = M' = Mo$, W; $M = Mo$, $M' = W$), 155
Synthesis of triynylcarbene complexes and of bi- and trinuclear complexes with heptatriynylidene C_7-bridges, 186

The cyclo-C_3 ligand: trimetallic cyclopropenium complexes of Group 6–8 metals, including the X-ray crystal structure of $[\{Fe(CO)_2\text{-}(Cp)\}_3(\mu_3\text{-}C_3)][SbF_6]$, 133

UV–vis/NIR
Acetylenic NIR-chromophores: 2,3-dialkynyl-1,4-diazabuta-1,3-diene complexes of Ni(0) and Ni(II), 193

Vinylidene
Unprecedented coupling of vinylidene and allenylidene ligands with dithiocarbamates: X-ray structure of $[Ru\{C(=C\text{-}CPh_2)SC(NMe_2)S\}\text{-}(S_2CNMe_2)(CO)(PPh_3)]$, 264

X-ray diffraction
Formation of vinyl ether derivatives in the reaction of tributyltin hydride with cluster supported Fischer carbene complexes: structural characterisation of $[(CO)_6Fe_2Te_2\{\mu\text{-}PhC{=}CC\text{-}(OEt)\}W(CO)_5]$, 150

Zirconocene complexes
Coupling of σ-acetylide ligands at Group 4 metallocene complexes to yield methylenecyclopropene-type frameworks, 115